

TABLE 59. Worldwide R&D paid for by others and performed by the company, by location of R&D performance, industry, and company size: 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Worldwide	Domestic	Foreign
All industries	21-23, 31-33, 42-81	61,121	57,473	3,648
Manufacturing industries	31-33	37,975 i	36,920 i	1,056
Food	311	169	D	D
Beverage and tobacco products	312	2	2	0
Textiles, apparel, and leather products	313-316	8	8	*
Wood products	321	17	17	0
Paper	322	25	25	0
Printing and related support activities	323	1	1	0
Petroleum and coal products	324	D	D	D
Chemicals	325	3,778	3,452	326
Basic chemicals	3251	134	120	14
Resin, synthetic rubber, fibers, and filaments	3252	24 i	23	1
Pesticide, fertilizer, and other agricultural chemical	3253	D	D	0
Pharmaceuticals and medicines	3254	3,495	3,185	310
Soap, cleaning compound, and toilet preparation	3256	3	3	0
Paint, coating, adhesive, and other chemical	3255, 3259	D	D	2
Plastics and rubber products	326	143	139	4
Nonmetallic mineral products	327	24	23	1
Primary metals	331	244	244	*
Fabricated metal products	332	110	109	*
Machinery	333	376	356	20
Agricultural implements	33311	9	7	2
Semiconductor machinery	333295	29	24	5 i
Engine, turbine, and power transmission equipment	3336	119	112	7
Other machinery	other 333	220	214	6
Computer and electronic products	334	7,824	7,571	253
Communications equipment	3342	1,664	1,628	36 i
Semiconductor and other electronic components	3344	630	563	68
Navigational, measuring, electromedical, and control instruments	3345	4,983	4,915	68
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	1,264 i	1,259 i	5
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments	334511	3,618	3,562	56
Other measuring and controlling instruments	other 3345	100	94	6
Computer and peripheral equipment and other computer and electronic products	other 334	547	466	81
Electrical equipment, appliances, and components	335	230	228	2
Transportation equipment	336	24,530 i	24,114 i	416
Automobiles, bodies, trailers, and parts	3361-3363	D	D	118
Aerospace products and parts	3364	22,468 i	22,170 i	298
Aircraft, aircraft engine, and aircraft parts	336411-336413	D i	15,402 i	D
Guided missile, space vehicle, and related parts	336414, 336415, 336419	D	6,768	D
Military armored vehicle, tank, and tank components	336992	2	2	0
Other transportation equipment	other 336	D i	D i	*
Furniture and related products	337	3	3	*
Miscellaneous manufacturing	339	D	321	D
Medical equipment and supplies	3391	122	114	8
Other miscellaneous manufacturing	3399	D	207	D
Nonmanufacturing industries	21-23, 42-81	23,146	20,553	2,592
Mining, extraction, and support activities	21	278	D	D
Utilities	22	33	33	0
Construction	23	5	5	0
Wholesale trade	42	172	D	D i
Retail trade	44, 45	0	0	0
Electronic shopping and mail-order houses	4541	0	0	0
Other retail trade	other 44, 45	0	0	0
Transportation and warehousing	48, 49	26 i	26 i	0
Information	51	843	811	32
Publishing	511	696	666	30
Newspaper, periodical, book, and directory publishers	5111	*	*	0
Software publishers	5112	696	666	30

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Telecommunications	517	83	82	1
Data processing, hosting, and related services	518	61	60	1
Other information	other 51	3	3	0
Finance and insurance	52	8	8	1
Real estate and rental and leasing	53	0	0	0
Professional, scientific, and technical services	54	21,456	18,915	2,541
Architectural, engineering, and related services	5413	2,071	2,058	14
Computer systems design and related services	5415	1,880	1,818	63
Scientific R&D services	5417	11,580	9,289	2,291
Biotechnology R&D	541711	3,356	2,798	559
Physical, engineering, and life sciences (except biotechnology) R&D	541712	7,559	5,828	1,731
Social sciences and humanities R&D	541720	665	663	1
Other professional, scientific, and technical services	other 54	5,925	5,751	174
Health care services	621–623	190	190	0
Other nonmanufacturing	55, 56, 61, 624, 71, 72, 81	134	134	0
All companies	–	61,121	57,473	3,648
Small companies (number of domestic employees) ^a				
5–499	–	14,695	14,461	234
5–99	–	9,545	9,342	203
5–49	–	4,394	4,351	43
5–24	–	2,571	2,537	34
25–49	–	1,823	1,815	8
50–99	–	5,150	4,991	160
100–249	–	2,302	2,287	15
250–499	–	2,848	2,832	16
Medium and large companies (number of domestic employees)				
500–999	–	1,676	1,542	134
1,000–4,999	–	6,292	5,625	668
5,000–9,999	–	6,065	4,279	1,786
10,000–24,999	–	9,380	8,847	533
25,000 or more	–	23,013 i	22,719 i	294

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = value > 50% of estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2007 North American Industry Classification System.

^a Upper bound based on U.S. Small Business Administration's definition of small business; Business R&D and Innovation Survey (BRDIS) does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned. Statistics are representative of companies located in United States that performed or funded R&D.

SOURCE: National Science Foundation/National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey, 2009.